

A Comparison of State and Federal Regulation of Per-and Polyfluoralkyl Substances

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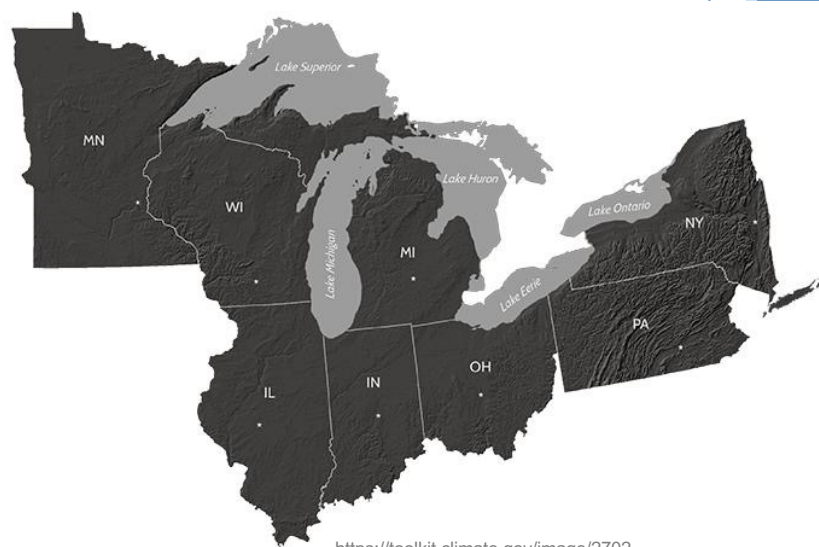
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Presentation Outline

- ▶ Introduction to PFAS
- ▶ Federal Regulation
- ▶ State Regulation
- ▶ Conclusion

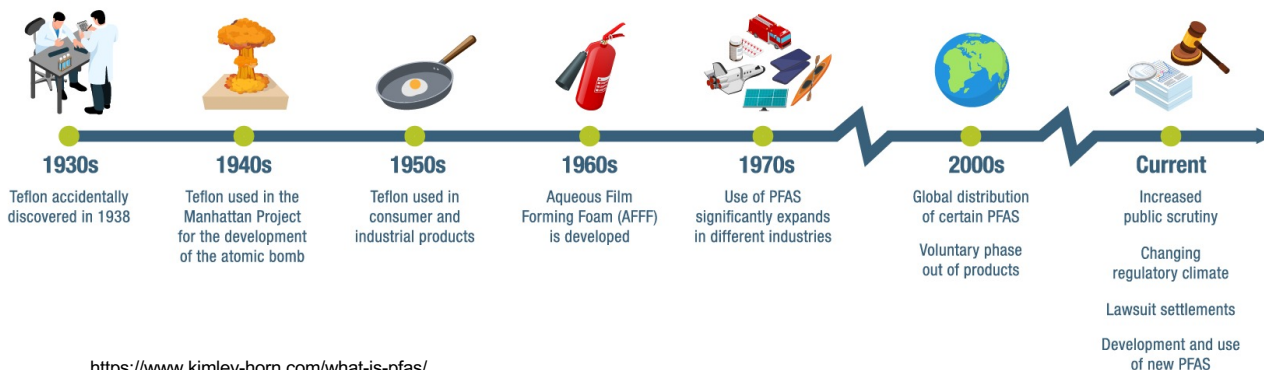


<https://toolkit.climate.gov/image/2702>

Introduction to PFAS

- Per- and polyfluoralkyl substances (PFAS) are a family of emerging contaminants.
 - PFAS comprises hundreds of individual compounds including perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS).
- PFAS do not break down easily and can accumulate in the environment.
- Studies have linked PFAS to various health issues.

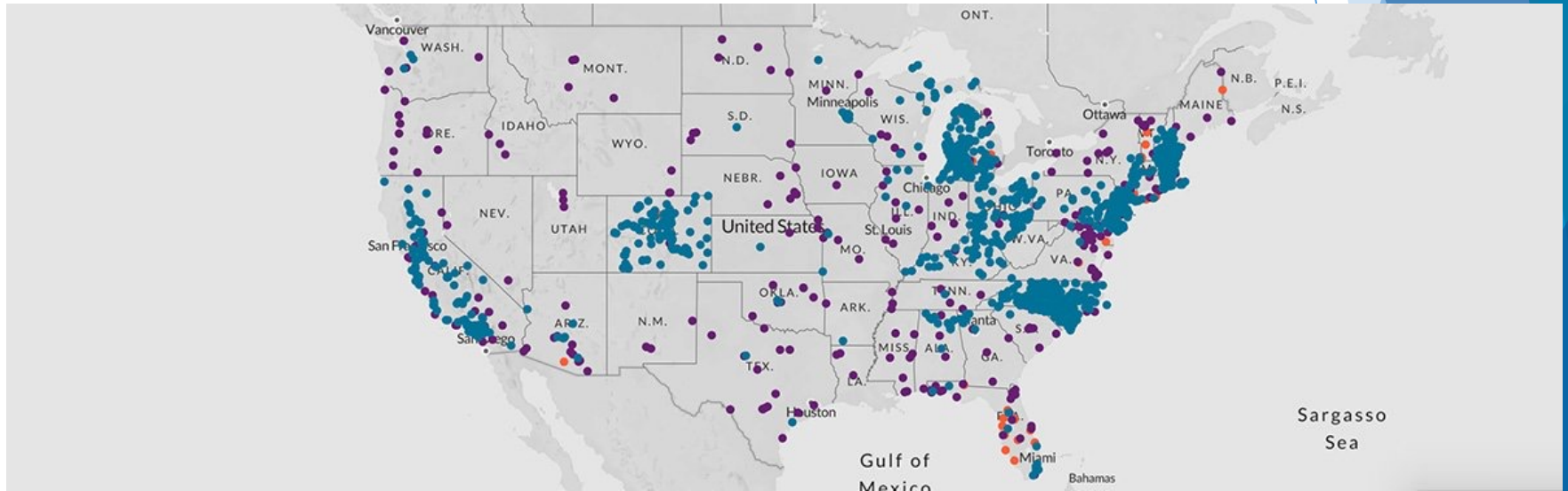
PFAS Development ...



...and Evolution

Map of PFAS Sites

- Communities across the United States have been discovering in recent years that PFAS have contaminated their water.
- Environmental Working Group has published a map showing over 2,337 sites in 40 states where there is known PFAS contamination.



Federal Regulation of PFAS

- ▶ Safe Drinking Water Act – protects public drinking water sources.
 - ▶ EPA has authority to regulate drinking water contaminants and set Maximum Contaminant Levels for a chemical and require monitoring.
 - ▶ Does not apply to private wells.
 - ▶ EPA may also issue non-binding health advisories.
- ▶ Clean Water Act (CWA) – regulates the discharge of pollutants into federal waters.
 - ▶ EPA has authority to set effluent limitations that specify a level of discharge reduction that may be achieved by the best available technology or similar standard.

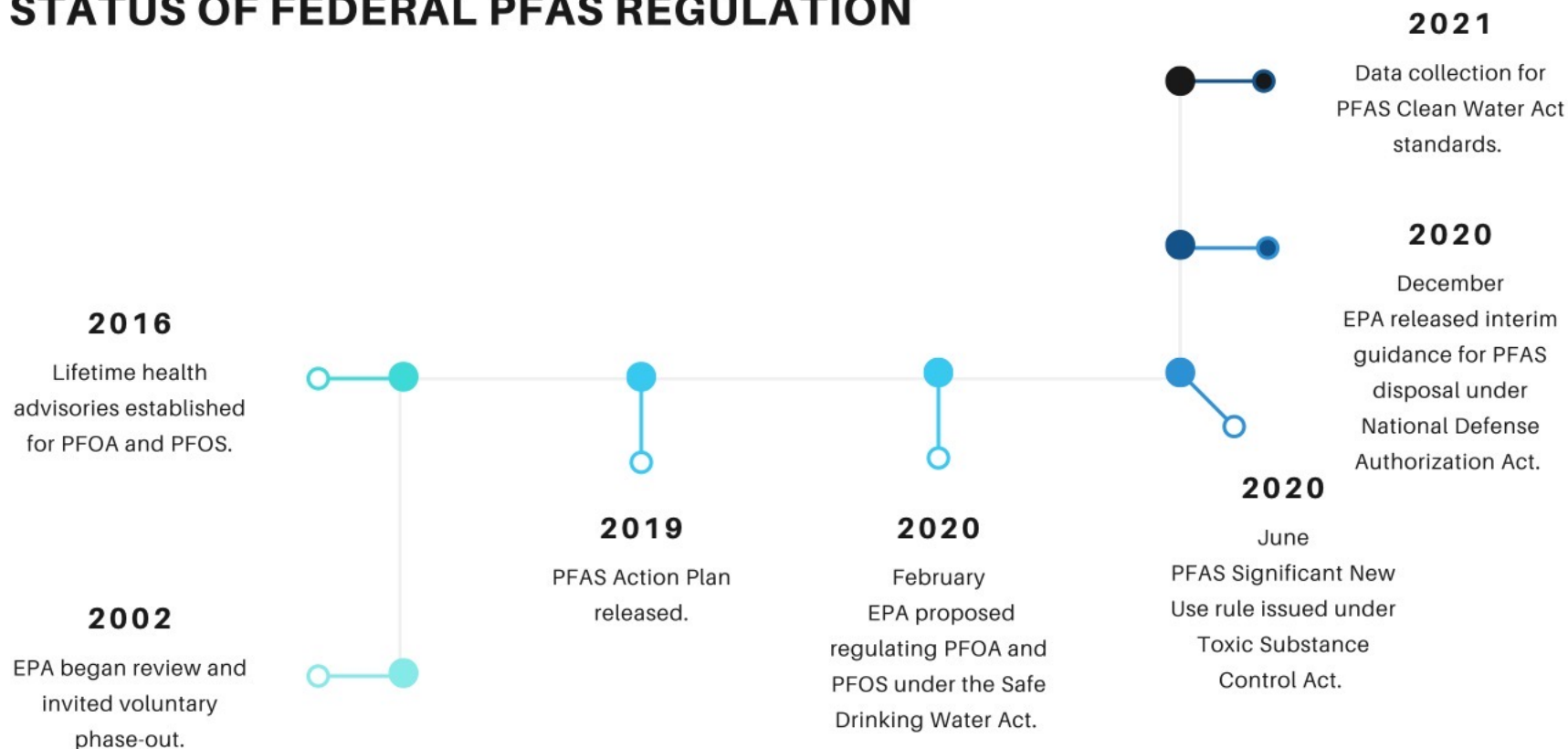


Federal Regulation of PFAS, Continued

- ▶ Toxic Substances Control Act (TSCA) – regulation of chemical substances.
 - ▶ If EPA determines that a chemical use is a significant new use, then a manufacturer must submit notice and review information to the EPA about how the chemical may increase the exposure to humans or the environment.
- ▶ Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – provides federal funds to clean up hazardous waste sites or other contaminants in the environment.
 - ▶ EPA could release guidelines for remediating groundwater contaminated with PFAS substances.
- ▶ Clean Air Act (CAA) – regulates air pollutants
 - ▶ EPA has authority to designate hazardous air pollutants for chemicals with human health impacts.



STATUS OF FEDERAL PFAS REGULATION



State Mechanisms to Regulate PFAS

- ▶ Generally, federal regulatory standards act as a “floor” and states may enact stricter standards.
- ▶ In the absence of federal standards, states can take a variety of regulatory approaches.
- ▶ States may regulate through statutes enacted by the legislature or through rulemaking procedures and regulations by state agencies.
 - ▶ This process allows for public comments and input from stakeholders and the scientific community.



**The 25th of same month, or the 10th of the following*

<https://coprrr.colorado.gov/rulemaking>

Minnesota Regulation of PFAS

- ▶ Minnesota does not have a state Water Quality Standard (WQS) set for PFAS.
- ▶ Department of Health published advisory values for PFOS for 15 parts per trillion.
 - ▶ Level set at a limit that is likely to pose little or no risk to human health.
 - ▶ Stricter than EPA advisory level of 70 parts per trillion.
- ▶ New PFAS strategy introduced in February 2021 to address PFAS chemicals within the state.
 - ▶ Plan not yet enacted. If passed, Minnesota would become the second state to regulate the entire class of PFAS chemicals as a hazardous substance.
 - ▶ Mandatory disclosure and monitoring.



Michigan Regulation of PFAS

- ▶ Michigan has established enforceable drinking water standards for PFAS under state law.
 - ▶ Compare to most states non-binding advisory limits.
- ▶ Department published Maximum Contaminant Levels for 7 PFAS chemicals.
 - ▶ Authority from Michigan Safe Drinking Water Act.
 - ▶ Final rule took effect in August 2020.
 - ▶ Standards set for drinking water and groundwater.
 - ▶ Monitoring requirement for public water supplies.



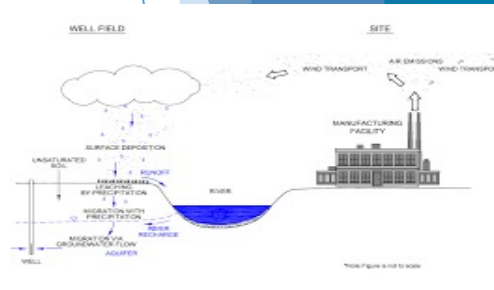
MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Contaminant	MCL (ng/L)*
Perfluorononanoic acid (PFNA)	6
Perfluorooctanoic Acid (PFOA)	8
Perfluorooctane Sulfonic Acid (PFOS)	16
Perfluorohexane Sulfonic Acid (PFHxS)	51
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	370
Perfluorobutane Sulfonic Acid (PFBS)	420
Perfluorohexanoic Acid (PFHxA)	400,000

*ng/L = Nanogram/liter

New York

- ▶ New York was the first state in 2016 to regulate PFOA as a hazardous substance. PFOS is also regulated as a hazardous substance.
- ▶ Hazardous substance designation requires proper storage and limited release of the chemical.
 - ▶ Once a chemical is designated as hazardous, then the chemical is prohibited from being released unless it is authorized. The release of the chemical must be reported.
 - ▶ Enacted under authority of the Environmental Conservation Law. 6 NYCRR § 597.
 - ▶ Exceptions for firefighting foam.
- ▶ Drinking Water maximum contaminant levels for PFOA and PFOS set at 10 parts per trillion.
 - ▶ One of the strictest levels in the U.S.
 - ▶ Water systems serving 10,000 or more people required to test for contaminant levels.
- ▶ Current bill to regulate concentrations of PFOA in the air.



https://www.mlive.com/news/2018/04/deq_pfas_air_toxic_levels.html

Conclusion

- ▶ There is no comprehensive, national regulation of PFAS.
- ▶ In absence of federal regulation, states have taken a variety of approaches to limit PFAS contamination.
 - ▶ Advisory values for drinking water and ground water.
 - ▶ Enforceable drinking water standards.
 - ▶ Regulation as a hazardous substance.
 - ▶ Potential for regulating PFAS as a class of hazardous substances.
- ▶ Likely stricter and more comprehensive federal regulation will emerge.
 - ▶ EPA leading the regulation of PFAS.
 - ▶ Biden Administration plan to address PFAS in environmental justice plan.
 - ▶ States may have to adjust standards to meet federal limits.



Thank you!

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